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D212-664-201
Job Sheet 168063-B



Part No: D212-664-201

Job Qty: 1 ea

Part Name: Aft Crosstube - High



Part Weight: 0 lbs

Status: Scheduled

Priority: Medium

Job Created: 11/9/17

Job Tracking No:

Due Date: 11/15/17

Created By: Linda Lacelle

Type: Stock

Description:

Customer: Rotorcraft Support Inc (CROTO01)

16425 Hart Street Van Nuys, CA, 91406 USA ph:(818) 997-7667 fx:(818) 997-1513.

Note: DWG DSI9563 REV B, D212-664-241 REV E IPP Rev:E 04.02.16 Reformat K/DS IPP Rev:F 06-03-29
Remove Coments on Pick List JLM IPP Rev:G 07-04-30 As per Rev C JLM IPP Rev:H 08-05-22 up date Qty of
rubber cushion DD verf:EC IPP REV:I 14.05.27 AS PER ECN14-570 DD VERF:JLM

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup	Run	Workcenter / Supplier	Lead Time	
					hrs	Hrs			
90	Start up Operation	1 Ea		11/14/17	0.00	0.00	Start Up Crosstubes		
110	Packaging	1 pcs		11/14/17	0.00	0.00	Packaging1		
120	CNC Bend Crosstubes	1 pcs		11/14/17	0.00	4.44	CNC Bend Crosstube		
130	QC	1 pcs		11/14/17	0.00	0.00	QC15		
140	Crosstubes	1 pcs		11/14/17	0.00	4.99	Crosstube		
150	HandFXtube	1 pcs		11/14/17	0.00	1.25	HandFinish5		
160	QC	1 pcs		11/14/17	0.00	0.00	QC7		
170	QC	1 pcs		11/14/17	0.00	0.00	QC5		
180	Outsource	1 pcs		11/14/17	0.00	0.00	Outsource2		
190	Packaging	1 pcs		11/14/17	0.00	0.00	Packaging2		
200	QC	1 pcs		11/14/17	0.00	0.00	QC5		
210	SprayPaint	1 pcs		11/14/17	0.00	1.47	Spray Paint		
220	QC	1 pcs		11/14/17	0.00	0.00	QC14		
230	Crosstubes	1 pcs		11/15/17	0.00	1.47	Crosstube		
240	QC	1 pcs		11/15/17	0.00	0.00	QC5		
250	Packaging	1 pcs		11/15/17	0.00	0.00	Packaging1		
260	QC	1 pcs		11/15/17	0.00	0.00	QC4		
265	DC	1 pcs		11/15/17	0.00	0.00	DC		
270	Packaging	1 pcs		11/15/17	0.00	0.00	Packaging3		
280	QC21-FG	1 Ea		11/15/17	0.00	0.00	QC21		

Part Op 120 - ***VERF SET-UP BEFORE BENDING BY: _____ *** Bend tube as per Dwg D212-664-241 using

Descriptions: CNC bender program 212-aft

140 - 1-Drill pilot holes in tube as per Dwg D212-664-241 using drill Jig DT8550, DT8551, drill table DT8577 and locate tower holes #8 as per QSI0010. 2-Ream hole to finish size in tube as per Dwg D212-664-241 using drill Jig DT8550 & DT8551. Check dimensions between holes, both sides on both cuffs, to ensure alignment with saddle holes. 3-Scribe part # and batch # using vibrating stylus as per Dwg D212-664-241 4- ***WEAR LATEX GLOVES HANDLING CROSSTUBE. *** Deburr & Inspect for surface damage. Repair damage within limits as per Dwg D212-664-241

150 - ***IMMEDIATELY AFTER GRINDING***

180 - ***WEAR LATEX GLOVES WHEN HANDLING CROSSTUBE.*** Issue P/O: _____

190 - ***WEAR LATEX GLOVES WHEN HANDLING CROSSTUBE.***

200 - ***WEAR LATEX GLOVES WHEN HANDLING CROSSTUBE.*** Inspect for damage & ensure results are as per

Dwg D212-664-241

210 - *** WEAR LATEX GLOVES WHEN HANDLING CROSSTUBE***

220 - Then, Wrap in plastic bag to protect from scratches

230 - *****LAY DOWN CROSSTUBE ON TABLE AND PUT DT10302 PINS IN SADDLE HOLE FACING UP, USE HOLE IN TAPE MEASURE TO PUT IN PINS FOR LOCATING CENTER OF CROSSTUBE. ***** 1- Abrade mating surfaces of support and crosstube with 180 grit sandpaper, clean the area with MEK or equivalent as per dwg 2- Install supports with Proseal 890 per D212-664-241 and QSI 015 A/R Proseal 890 Batch: _____ EXP: _____

PROSEAL CURE TIME 72 HOURS: Start: _____ Finish: _____ 3- Install clamps with rubber cushion (ENSURE CLAMPS ARE INSTALL ON TOP SIDE OF CROSSTUBE) using DT9565 as per Dwg D212-664-241. ***Torque all clamps to 80-100 IN-LBS.***

240 - ***RE-CHECK TORQUE ON CLAMP AFTER PROSEAL HAS CURED FOR 72HOURS AS PER DWG.***

260 - ***VERIFY BY _____ BATCH # TO MATCH W/O _____

265 - Photocopy bluefile and create labels as per PPP D212-664-201 CHG006

270 - Identify and pack for shipping as per PPP D212-664-201 Location : FG098

Job Allocations

Operation	Component Part	Required	Inventory	Allocated	Std Qty
90-Start up Operation	D212-664-201TRN	1	8	0	0
250-Packaging	AN6-40A	4	82	0	0
	AN6-41A	2	56	0	0
	D3428-1	1	19	0	0
	MS21042L6	6	226	0	0
	NAS1149D0663J	18	645	0	0

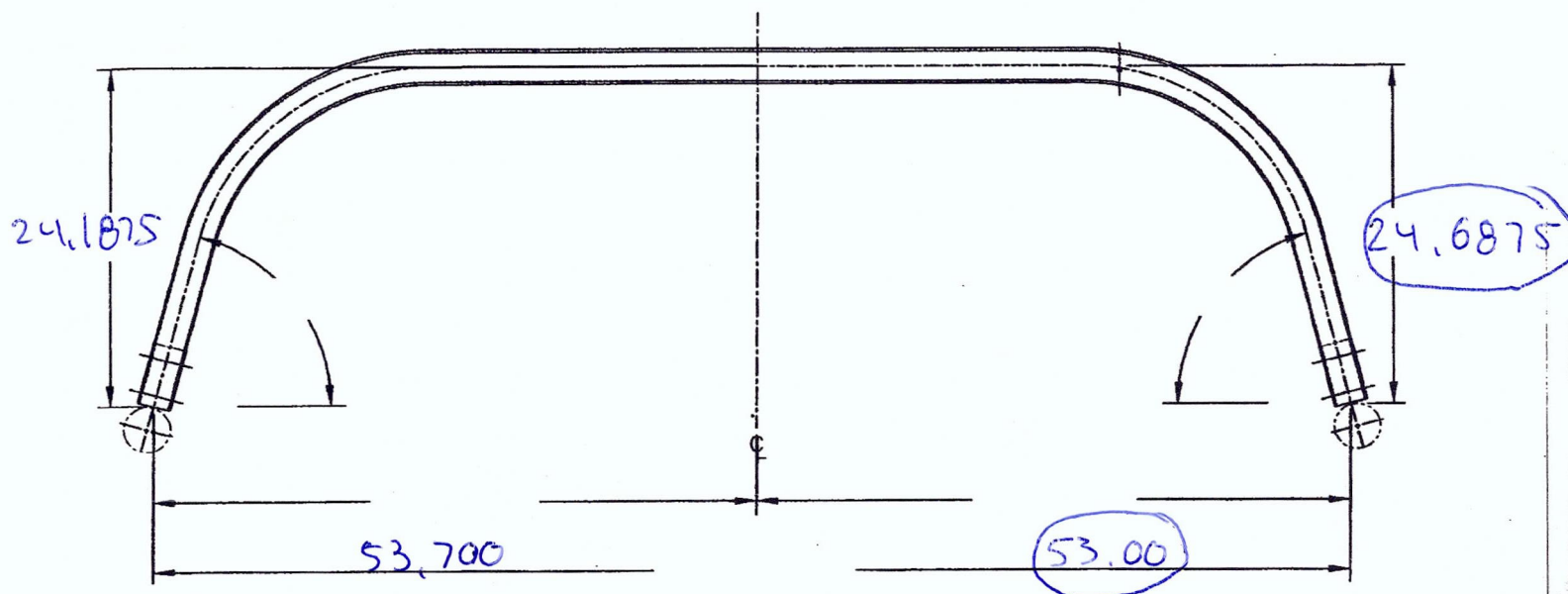
Part Specifications

Specifications could not be found.

Plex 11/10/17 12:01 PM DART.LACELLE.LINDA

DART AEROSPACE LTD		Work Order:	168063-B
Description: Crosstube High Aft (205/212)		Part Number:	D212-664-201
Inspection Dwg: D212-664-241 Rev: E		Page 1 of 1	

Required Dimension	Min	Max
Height	24.17	24.43
1/2 Span	53.59	53.85
Angle	49	52
Total Span	107.18	107.70
Bending Passes	5	--
Crushing	--	7.2%



	Side A	Side B
Bending Passes		
Crushing		
Comments		

QC15 Inspection	
Date	

Rev	Date	Change	Revised by	Approved
A	07.02.06	New Issue	KJ/JM	
B	07.05.08	Dimensions updated per Dwg rev. C	KJ/JLM	
C	10.04.01	Dwg Rev updated	KJ	
D	12.04.16	Added bending, crushing dimensions	KJ	
E	14.07.08	Crushing percentage revised	KJ	

WORK ORDER NON-CONFORMANCE / UPDATE

AEROSPACE

QA Closed:

Date:

Work Order update only

Work Order: <u>168063-B</u> Part No. <u>D212-664-201</u> NCR No.		DISPOSITION Rework ☐ Scrap ☒ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Cross tube ☒ Machining ☐ Small Fab ☐ Thermoforming ☐ Finishing ☐ Large Fab ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date : <u>16-05-15</u>		Step #: <u>120</u>		QTY Effective : <u>1</u>			MRB (QSI042) Approval DAS <u>2</u> <u>16-05-15</u> 9-89		
Description Work Order Deviation				Disposition				Completed By Lead hand / Supervisor Approval Verification <u>JW</u> <u>16-05-15</u> QC / QA Coordinator Approval DAS <u>2</u> <u>16-05-15</u> 9-89	
<u>Tube overbent to 53.000"</u>				<u>SCRAP</u>					
Root Cause Environment ☐ No Re-verification ☐ Design ☐ Operator ☐ Doc/Data ☐ Offset/Setup ☐ Equip/Tooling ☐ Supplier ☐ Handling/Pre ☐ Training ☐ Material ☒ Use for Testing ☐ Internal Transport ☐ Poor Information ☐ Tribal Knowledge ☐ Rushing ☐ LOA ☐ Product Improvement ☐ Substation ☐ Process Improvement ☐ Past Expiry Date ☐ Manufacturing Process ☐ Misidentified ☐ Past Due ☐		Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐		FAULT CATEGORY Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐		Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabelled ☐ Fit/Function ☐ Misaligned/off center ☐		Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☒ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐	
		OTHER :							